## **RECEIVED**

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# TECH CENTER 1600/2900



1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/08/599,974E

DATE: 02/11/2003 TIME: 10:56:27

Input Set : A:\EP.txt

```
3 <110> APPLICANT: The Rockefeller University
             Friedman, Jeffrey M.
             Lee, Gwo-Hwa
      5
              Proenca, Ricardo
      8 <120> TITLE OF INVENTION: DB, THE RECEPTOR FOR LEPTIN, NUCLEIC ACIDS ENCODING THE
RECEPTOR, AND USES
             THEREOF
    11 <130> FILE REFERENCE: 600-1-162CP1
     13 <140> CURRENT APPLICATION NUMBER: 08/599,974E
     14 <141> CURRENT FILING DATE: 1996-02-14
    16 <150> PRIOR APPLICATION NUMBER: US 09/586,594
     17 <151> PRIOR FILING DATE: 1996-01-16
     19 <160> NUMBER OF SEQ ID NOS: 97
     21 <170> SOFTWARE: PatentIn version 3.1
                                                             FNTERED
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 2529
     25 <212> TYPE: DNA
     26 <213> ORGANISM: Mus musculus
     28 <400> SEQUENCE: 1
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                                                                               60
     31 ccatgccgga tcagcaccag cttgtagctc gtgccgaatt cggcacgagg ttgctttggg
                                                                              120
     33 aatgagcaag gtcaaaactg ctctgcactc acagacaaca ctgaagggaa gacactggct
                                                                              180
     35 tcagtagtga aggcttcagt ttttcgccag ctaggtgtaa actgggacat agagtgctgg
                                                                              240
     37 atgaaagggg acttgacatt attcatctgt catatggagc cattacctaa gaaccccttc
                                                                              300
     39 aagaattatg actctaaggt ccatctttta tatgatctgc ctgaagtcat agatgattcg
                                                                              360
     41 cctctgcccc cactgaaaga cagctttcag actgtccaat gcaactgcag tcttcgggga
                                                                              420
     43 tgtgaatgtc' atgtgccggt acccagagcc aaactcaact acgctcttct gatgtatttg
                                                                              480
     45 gaaatcacat ctgccggtgt gagttttcag tcacctctga tgtcactgca gcccatgctt
                                                                              540
                                                                              600
     47 qttqtqaaac ccqatccacc cttaggtttg catatggaag tcacagatga tggtaattta
     49 aagatttett gggacageca aacaatggea eeattteege tteaatatea ggtgaaatat
                                                                              660
                                                                              720
     51 ttagagaatt.ctacaattgt aagagaggct gctgaaattg tctcagctac atctctgctg
                                                                              780
    •53 qtaqacaqtq tqcttcctqq atcttcatat gaggtccagg tgaggagcaa gagactggat
     55 ggttcaggag tctggagtga ctggagttca cctcaagtct ttaccacaca agatgttgtg
                                                                              840
                                                                              900
     57 tattttccac ccaaaattct gactagtgtt ggatcgaatg cttctttca ttgcatctac
                                                                              960
     59 aaaaacgaaa accagattat ctcctcaaaa cagatagttt ggtggaggaa tctagctgag
                                                                             1020
     61 aaaatccctg agatacagta cagcattgtg agtgaccgag ttagcaaagt taccttctcc
                                                                             1080
     63 aacctgaaag ccaccagacc tcgagggaag tttacctatg acgcagtgta ctgctgcaat
                                                                             1140
     65 gagcaggcgt gccatcaccg ctatgctgaa ttatacgtga tcgatgtcaa tatcaatata
                                                                             1200
     67 tcatgtgaaa ctgacgggta cttaactaaa atgacttgca gatggtcacc cagcacaatc
     69 caatcactag tgggaagcac tgtgcagctg aggtatcaca ggcgcagcct gtattgtcct
                                                                             1260
     71 gatagtccat ctattcatcc tacgtctgag cccaaaaact gcgtcttaca gagagacggc
                                                                             1320
     73 ttttatgaat gtgttttcca gccaatcttt ctattatctg gctatacaat gtggatcagg
                                                                             1380
     75 atcaaccatt ctttaggttc acttgactcg ccaccaacgt gtgtccttcc tgactccgta
                                                                             1440
     77 gtaaaaccac tacctccatc taacgtaaaa gcagagatta ctgtaaacac tggattattg
                                                                             1500
```

#### RAW SEQUENCE LISTING

PATENT APPLICATION: US/08/599,974E

DATE: 02/11/2003 TIME: 10:56:27

Input Set : A:\EP.txt

```
79 aaagtatett gggaaaagee agtettteeg gagaataace tteaatteea gattegatat
                                                                           1560
                                                                           1620
    81 qqcttaagtg gaaaagaaat acaatggaag acacatgagg tattcgatgc aaagtcaaag
                                                                           1680
    83 tetaccages tactagtate agasetetat geagtetatg tagtecaggt tegetacegg
    85 cggttggatg gactaggata ttggagtaat tggagcagtc cagcctatac gcttgtcatg
                                                                           1740
                                                                           1800
    87 qatqtaaaag ttcctatgag agggcctgaa ttttggagaa aaatggatgg ggacgttact
                                                                           1860
    89 aaaaaqqaqa qaaatgtcac cttgctttgg aagcccctga cgaaaaatga ctcactgtgt
                                                                           1920
    91 agtgtgagga ggtacgtggt gaagcatcgt actgcccaca atgggacgtg gtcagaagat
    93 gtgggaaatc ggaccaatct cactttcctg tggacagaac cagcgcacac tgttacagtt
                                                                           1980
    2040
                                                                           2100
     97 atgagtaaag tgagtgctgt ggagtcactc agtgcttatc ccctgagcag cagctgtgtc
    99 atcctttcct ggacactgtc acctgatgat tatagtctgt tatatctggt tattgaatgg
                                                                           2160
                                                                            2220
    101 aagatcctta atgaagatga tggaatgaag tggcttagaa ttccctcgaa tgttaaaaag
    103 ttttatatcc acgataattt tattcccatc gagaaatatc agtttagtct ttacccagta
    105 tttatggaag gagttggaaa accaaagata attaatggtt tcaccaaaga tgctatcgac
                                                                            2340
    107 aagcagcaga atgacgcagg gctgtatgtc attgtaccca taattatttc ctcttgtgtc
                                                                            2400
    109 ctactgctcg gaacactgtt aatttcacac cagagaatga aaaagttgtt ttgggacgat
                                                                            2460
                                                                            2520
    111 gttccaaacc ccaagaattg ttcctgggca caaggactga atttccaaaa gagaacggac
                                                                            2529
    113 actctttga
    116 <210> SEQ ID NO: 2
     117 <211> LENGTH: 842
     118 <212> TYPE: PRT
     119 <213> ORGANISM: Mus musculus
     121 <220> FEATURE:
     122 <221> NAME/KEY: MISC FEATURE
     123 <222> LOCATION: (29)..(29)
     124 <223> OTHER INFORMATION: X can be any amino acid
     127 <400> SEQUENCE: 2
     129 Gly Leu Arg Ser Ala Ser Tyr Gln Pro Leu Lys Arg Phe Ser Arg Phe
     130 1
W--> 133 Gln Ala Leu Ser Pro Cys Arg Ile Ser Thr Ser Leu Xaa Leu Val Pro
     134
                    20
                                         25
     137 Asn Ser Ala Arg Gly Cys Phe Gly Asn Glu Gln Gly Gln Asn Cys Ser
                                    40
     141 Ala Leu Thr Asp Asn Thr Glu Gly Lys Thr Leu Ala Ser Val Val Lys
                                55
     145 Ala Ser Val Phe Arg Gln Leu Gly Val Asn Trp Asp Ile Glu Cys Trp
                            70
                                                75
     149 Met Lys Gly Asp Leu Thr Leu Phe Ile Cys His Met Glu Pro Leu Pro
     150
                        85
     153 Lys Asn Pro Phe Lys Asn Tyr Asp Ser Lys Val His Leu Leu Tyr Asp
                    100
                                        105
     157 Leu Pro Glu Val Ile Asp Asp Ser Pro Leu Pro Pro Leu Lys Asp Ser
                                    120
     158
                115
    161 Phe Gln Thr Val Gln Cys Asn Cys Ser Leu Arg Gly Cys Glu Cys His
                                135
                                                    140
     165 Val Pro Val Pro Arg Ala Lys Leu Asn Tyr Ala Leu Leu Met Tyr Leu
                                                155
                            150
     169 Glu Ile Thr Ser Ala Gly Val Ser Phe Gln Ser Pro Leu Met Ser Leu
                                            170
     170
                        165
```

### RAW SEQUENCE LISTING

PATENT APPLICATION: US/08/599,974E

DATE: 02/11/2003 TIME: 10:56:27

Input Set : A:\EP.txt

	173 174	Gln	Pro	Met	Leu 180	Val	Val	Lys	Pro	Asp 185	Pro	Pro	Leu	Gly	Leu 190	His	Met
		Glu	Val	Thr 195		Asp	Gly	Asn	Leu 200	Lys	Ile	Ser	Trp	Asp 205	Ser	Gln	Thr
-		Met	Ala 210		Phe	Pro	Leu	Gln 215	Tyr	Gln	Val	Lys	Tyr 220		Glu	Asn	Ser
	185	Thr 225		Val	Arg	Glu	Ala 230		Glu	Ile	Val	Ser 235		Thr	Ser	Leu	Leu 240
	189		Asp	Ser	Val	Leu 245		Gly	Ser	Ser	Tyr 250		Val	Gln	Val	Arg 255	
		Lys	Arg	Leu	Asp 260		Ser	Gly	Val	Trp 265		Asp	Trp	Ser	Ser 270		Gln
		Val	Phe			Gln	Asp	Val	Val 280		Phe	Pro	Pro	Lys 285		Leu	Thr
2		Ser		275 Gly	Ser	Asn	Ala		Phe	His	Cys	Ile			Asn	Glu	Asn
2			290 Ile	Ile	Ser	Ser		295 Gln	Ile	Val	Trp		300 Arg	Asn	Leu	Ala	
:	209	305 Lys	Ile	Pro	Glu		310 Gln	Tyr	Ser	Ile		315 Ser	Asp	Arg	Val		320 Lys
	210 213	Val	Thr	Phe	Ser	325 Asn	Leu	Lys	Ala		330 Arg	Pro	Arg	Gly		335 Phe	Thr
	214 217	Tyr	Asp	Ala	340 Val	Tyr	Cys	Cys	Asn	345 Glu	Gln	Ala	Cys	His	350 His	Arg	Tyr
	218	70 T =	G1	355	m	₹7	т1.	7	360 Val	7.00	тіс	7 an	Tlo	365	Cvc	Clu	Thr
:	222		370					375					380				
:	226	385					390		Thr			395					400
	230					405			Val		410					415	
	234				420				Ser	425					430		
	238			435					Gly 440					445			
	241 242	Ile	Phe 450	Leu	Leu	Ser	Gly	Tyr 455	Thr	Met	Trp	Ile	Arg 460	Ile	Asn	His	Ser
		Leu 465	Gly	Ser	Leu	Asp	Ser 470	Pro	Pro	Thr	Cys	Val 475	Leu	Pro	Asp	Ser	Val 480
	249 250	Val	Lys	Pro	Leu	Pro 485	Pro	Ser	Asn	Val	Lys 490	Ala	Glu	Ile	Thr	Val 495	Asn
•		Thr	Gly	Leu	Leu 500		Val	Ser	Trp	Glu 505		Pro	Val	Phe	Pro 510	Glu	Asn
		Asn	Leu	Gln 515		Gln	Ile	Arg	Tyr 520			Ser	Gly	Lys 525	Glu	Ile	Gln
		Trp	Lys 530		His	Glu	Val	Phe 535	Asp	Ala	Lys	Ser	Lys 540		Ala	Ser	Leu
	265			⁄Ser	Asp	Leu	Cys 550		Val	Tyr	Val	Val 555		Val	Arg	Cys	Arg 560
	266	5/15					7 7 11										

DATE: 02/11/2003

#### RAW SEQUENCE LISTING

PATENT APPLICATION: **US/08/599,974E** TIME: 10:56:27

Input Set : A:\EP.txt

```
270
                   565
                                      570
273 Thr Leu Val Met Asp Val Lys Val Pro Met Arg Gly Pro Glu Phe Trp
                                  585
               580
277 Arg Lys Met Asp Gly Asp Val Thr Lys Lys Glu Arg Asn Val Thr Leu
                              600
          595
281 Leu Trp Lys Pro Leu Thr Lys Asn Asp Ser Leu Cys Ser Val Arg Arg
           615
282 610
285 Tyr Val Val Lys His Arg Thr Ala His Asn Gly Thr Trp Ser Glu Asp
                                         635
286 625
         630
289 Val Gly Asn Arg Thr Asn Leu Thr Phe Leu Trp Thr Glu Pro Ala His
                   645
                                     650
293 Thr Val Thr Val Leu Ala Val Asn Ser Leu Gly Ala Ser Leu Val Asn
               660
                                  665
297 Phe Asn Leu Thr Phe Ser Trp Pro Met Ser Lys Val Ser Ala Val Glu
                              680
298 675
301 Ser Leu Ser Ala Tyr Pro Leu Ser Ser Ser Cys Val Ile Leu Ser Trp
                                             700
                          695
305 Thr Leu Ser Pro Asp Asp Tyr Ser Leu Leu Tyr Leu Val Ile Glu Trp
                      710
                                         715
306 705
309 Lys Ile Leu Asn Glu Asp Asp Gly Met Lys Trp Leu Arg Ile Pro Ser
                                     730
                  725
313 Asn Val Lys Lys Phe Tyr Ile His Asp Asn Phe Ile Pro Ile Glu Lys
                                  745
314 740
317 Tyr Gln Phe Ser Leu Tyr Pro Val Phe Met Glu Gly Val Gly Lys Pro
                              760
321 Lys Ile Ile Asn Gly Phe Thr Lys Asp Ala Ile Asp Lys Gln Gln Asn
322 770
                          775
325 Asp Ala Gly Leu Tyr Val Ile Val Pro Ile Ile Ile Ser Ser Cys Val
                      790
                                          795
329 Leu Leu Gly Thr Leu Leu Ile Ser His Gln Arg Met Lys Lys Leu
                                      810
                   805
333 Phe Trp Asp Asp Val Pro Asn Pro Lys Asn Cys Ser Trp Ala Gln Gly
    820
                                 825
337 Leu Asn Phe Gln Lys Arg Thr Asp Thr Leu
338
    835
341 <210> SEQ ID NO: 3
342 <211> LENGTH: 2848
343 <212> TYPE: DNA
344 <213> ORGANISM: Mus musculus
346 <220> FEATURE:
·347 <221> NAME/KEY: misc feature
348 <222> LOCATION: (44)..(44)
349 <223> OTHER INFORMATION: N can be A, C, T or G
352 <220> FEATURE:
353 <221> NAME/KEY: misc feature
354 <222> LOCATION: (67)..(67)
355 <223> OTHER INFORMATION: N can be A, C, T or G
358 <220> FEATURE:
359 <221> NAME/KEY: misc_feature
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#### RAW SEQUENCE LISTING

PATENT APPLICATION: US/08/599,974E

DATE: 02/11/2003 TIME: 10:56:27

Input Set : A:\EP.txt

Output Set: N:\CRF4\02112003\H599974E.raw

360 <222> LOCATION: (234)..(234) 361 <223> OTHER INFORMATION: N can be A, C, T or G 364 <220> FEATURE: 365 <221> NAME/KEY: misc feature 366 <222> LOCATION: (483)..(483) 367 <223> OTHER INFORMATION: N can be A, C, T or G 370 <220> FEATURE: 371 <221> NAME/KEY: misc feature 372 <222> LOCATION: (527)..(527) 373 <223> OTHER INFORMATION: N can be A, C, T or G 376 <220> FEATURE: 377 <221> NAME/KEY: misc feature 378 <222> LOCATION: (564)..(564) 379 <223> OTHER INFORMATION: N can be A, C, T or G 382 <220> FEATURE: 383 <221> NAME/KEY: misc feature 384 <222> LOCATION: (1237)..(1237) 385 <223> OTHER INFORMATION: N can be A, C, T or G 388 <220> FEATURE: 389 <221> NAME/KEY: misc\_feature 390 <222> LOCATION: (1335)..(1335) 391 <223> OTHER INFORMATION: N can be A, C, T or G 394 <220> FEATURE: 395 <221> NAME/KEY: misc feature 396 <222> LOCATION: (2038)..(2038) 397 <223> OTHER INFORMATION: N can be A, C, T or G 400 <220> FEATURE: 401 <221> NAME/KEY: misc feature 402 <222> LOCATION: (2179)..(2179) 403 <223> OTHER INFORMATION: N can be A, C, T or G 406 <220> FEATURE: 407 <221> NAME/KEY: misc feature 408 <222> LOCATION: (2182)..(2182) 409 <223> OTHER INFORMATION: N can be A, C, T or G 412 <220> FEATURE: 413 <221> NAME/KEY: misc feature 414 <222> LOCATION: (2183) .. (2183) 415 <223> OTHER INFORMATION: N can be A, C, T or G 418 <220> FEATURE: 419 <221> NAME/KEY: misc feature '420 <222> LOCATION: (2219)..(2219) 421 <223> OTHER INFORMATION: N can be A, C, T or G 424 <220> FEATURE: 425 <221> NAME/KEY: misc feature 426 <222> LOCATION: (2576)..(2576) 427 <223> OTHER INFORMATION: N can be A, C, T or G 430 <220> FEATURE:

431 <221> NAME/KEY: misc\_feature 432 <222> LOCATION: (2610)..(2610) RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/08/599,974E
DATE: 02/11/2003
TIME: 10:56:28

Input Set : A:\EP.txt

Output Set: N:\CRF4\02112003\H599974E.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:2; Xaa Pos. 29
Seq#:2; Xaa Pos. 29
Seq#:3; N Pos. 44,67,234,483,527,564/1287,1335,2038,2179,2182,2183,2219
Seq#:3; N Pos. 2676,2610
Seq#:4; Xaa Pos. 79
Seq#:5; N Pos. 160,258
Seq#:6; Xaa Pos. 14,19,25,58,67,68,84,86
Seq#:35; N Pos. 5
Seq#:39; N Pos. 55,62,72,143
Seq#:40; N Pos. 83,101,181
Seq#:41; N Pos. 193
Seq#:57; Xaa Pos. 29
Seq#:58; Xaa Pos. 29
Seq#:59; Xaa Pos. 29
Seq#:60; Xaa Pos. 79
Seq#:61; Xaa Pos. 14,19,25,58,67,68,84,86
Seq#:62; Xaa Pos. 79
Seq#:63; Xaa Pos. 14,19,25,58,67,68,84,86
```

#### Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 8